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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,733	09/26/2003	Julien Lefebvre	051173-5004-US	6762

9629 7590 12/30/2005

MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER	
HON, SOW FUN	
ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/670,733	LEFEBVRE ET AL.	
	Examiner	Art Unit	
	Sow-Fun Hon	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26,29-32 and 34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25, 29-32 and 34* is/are rejected.

7)☒ Claim(s) *26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Withdrawn Rejections

1. The objection to the drawings has been withdrawn due to submission of new drawings dated 10/11/05.

2. The 35 U.S. 112, 2nd paragraph rejection of claims 2, 25-29 in paragraph 8 of the Office action dated 03/23/05 has been withdrawn due to Applicant's validation of the broad interpretation of the claims in terms of the location of the anti-skid layer.

3. The 35 U.S.C.112, 2nd paragraph rejections of claim 26 and claim 28 in paragraphs 9-10 of the Office action dated 03/23/05, have been withdrawn due to Applicant's cancellation of said claims.

4. The 35 U.S.C. 103(a) rejections have been withdrawn due to Applicant's amendment dated 09/23/05.

New Rejections

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-6, 11-15, 20-22, 24, 30, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandzsu (US 6,444,080) in view of Altshuler (US 6,132,844) and Lefebvre (US 5,732,745), as evidenced by Miyashita (US 5,236,483).

Regarding claims 1, 21-22, Mandzsu teaches a thermoplastic film which is roughened by polymer particles which have a suitable size and abrasion resistance on the surface of the film, in order to prevent the packaging films from skidding, or slipping on each other (abstract). The film has a total thickness of 6 mil (0.150 mm, column 7, lines 65-68), which is within the claimed range of from about 1 mil to about 15 mil. The anti-skid particles have a particle size of 100 to 200 microns (polypropylene grains, column 8, lines 47-50), which is within the claimed range of between 50 and 500 microns, 60 and 250 microns, and 60 and 180 microns.

Mandzsu fails to teach that the polypropylene anti-skid additive has a melt temperature greater than 500 °F.

However, Altshuler teaches that anti-skid additives can be glass as well as polymeric particles (column 3, lines 53-61), for the purpose of providing an antiskid article (antislip, column 3, lines 53-55) for the particular end-use (column 4, lines 1-3). Glass has a melt temperature greater than 500 °F, as evidenced by Miyashita.

Miyashita teaches that the melting point of silica glass is 3115 °F (1713 °C) (column 4, lines 23-35), which is greater than 500 °F.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used an anti-skid additive which has a melt temperature greater than 500 °F as the anti-skid additive of Mandzu, in order to meet the requirements of the desired end-use, as taught by Altshuler.

Mandzsu in view of Altshuler, as evidenced by Miyashita, fails to teach that the film is elastomeric.

However, Lefebvre teaches an elastomeric film (elastic, column 2, lines 5-7) comprising at least one layer and having a total thickness of from about 3.6 to 4.4 mils (column 5, lines 10-15), which is within the claimed thickness of from about 1 mil to about 15 mil. Lefebvre teaches that the film is made into packaging (tube for storage, column 2, lines 21-35), for the purpose of providing packaging, which can be stretched radially without tearing or a substantial permanent deformation (column 2, lines 38-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used an elastomeric film as the film of Mandzu, in view of Altshuler, as evidenced by Miyashita, in order to provide packaging which can be stretched radially without tearing or substantially or substantially permanent deformation, as taught by Lefebvre.

Regarding claims 2-6, 11-15, 20, Mandzsu in view of Altshuler, as evidenced by Miyashita, fails to teach that the film comprises between 2 and 11 layers wherein each layer makes up from 5 to 95% of the total thickness, that at least one layer comprises an ethylene-vinyl acetate (EVA) copolymer, let alone the vinyl acetate content of the EVA copolymer, that at least one layer comprises a copolymer of linear low density polyethylene, let alone one which has a density of greater than 0.910 g/cm^3, that it is a pure copolymer of a C_4-C_{20} alpha-olefin, that it has a melt index between 0.1 and 30 g/10 min, or that it is combined with EVA copolymer..

However, Lefebvre teaches that the film can multi-ply (column 5, lines 20-30), hence overlapping the claimed range of between 2 and 11 layers, for the purpose of providing the desired end-use. The layers may have the same or different thicknesses

(column 5, lines 30-35). In the case of the two-ply film with the same thickness, each layer will make up 50 % of the total thickness of the film, which is within the claimed range of from 5 to 95 %. Lefebvre teaches that at least one layer comprises 55 to 90 % by weight of an ethylene vinyl acetate copolymer (column 2, lines 15-20), which overlaps the claimed range of 10 to 100 %, 10 to 95 % and 25 to 85 %. Lefebvre teaches that the vinyl acetate content of the EVA copolymer is 2 to 6 % (column 3, lines 44-45), which overlaps the claimed range of from 2 to 45 %. Lefebvre teaches that the at least one layer comprises from 5 to 35 % by weight of a copolymer of linear low density polyethylene (column 2, lines 15-20), which overlaps the claimed range of 5 to 100 %, 10 to 95 %, and 15 to 75 %, having a density of from 0.915 to 0.925 (column 3, lines 62-65), which is greater than 0.910 g/cm^3. Lefebvre teaches DOWLEX-2021, DOWLEX 2045, DOWLEX 2070, DOWLEX-2073, DOWLEX-2101, L-2007-F, L-2001-F AND L-2002-F as suitable LLDPE resins (column 3, lines 65-70 and column 4, lines 1-5), which are the same LLDPE resins used by Applicant, and therefore are pure copolymers of a C_4-C_{20} alpha-olefin as defined by Applicant's specification (page 7). Lefebvre teaches that the copolymer of LLDPE has a melt index of from 0.5 to 1.6 g/10 min (dg/min) (column 3, lines 64-66), which overlaps the claimed range of between 0.1 and 30 g/10 min. Lefebvre teaches that the at least one layer comprises a combination of at least two resins, EVA copolymer and LLDPE (column 2, lines 15-20). Lefebvre teaches that the film is made into packaging (tube for storage, column 2, lines 21-35), for the purpose of providing packaging, which can be stretched radially without tearing or a substantial permanent deformation (column 2, lines 38-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used the elastomeric film of Lefebvre, as the film of Mandzu, in view of Altshuler, as evidenced by Miyashita, in order to provide packaging which can be stretched radially without tearing or substantially or substantially permanent deformation, as taught by Lefebvre.

Regarding claim 24, Mandzsu in view of Altshuler, as evidenced by Miyashita, fails to teach that the at least one layer comprises a UV stabilizer, a pigment, a slip agent, an antiblocking agent, or any combination thereof.

However, Lefebvre teaches that the at least one layer comprises a UV stabilizer, a pigment, a slip agent and an antiblocking agent (column 3, lines 20-35) for the purpose of providing the required properties of the film (column 3, lines 33-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have added a UV stabilizer, a pigment, a slip agent and an antiblocking agent, or combinations thereof, to the anti-skid layer of the elastomeric film of Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, in order to provide the required properties of the film, as taught by Lefebvre.

Regarding claim 30, Mandzsu teaches that the film is in the form of a pre-folded gusseted film (column 8, lines 15-25).

Regarding claim 34, Mandzsu in view of Altshuler, as evidenced by Miyashita, fails to specify that the at least one layer comprises from 0.1 to 10% of the anti-skid additive by weight.

However, Mandzu teaches that the anti-skid additive is provided in the layer such that at least 50 particles per square centimeter should be in the layer (protrusions in the roughed part of the surface of the film, column 8, lines 15-20). Thus, Mandzu teaches that it would have been obvious to one of ordinary skill in the art to have added an amount of anti-skid additive to the layer such that it has at least 50 particles per square centimeter in the layer for the purpose of providing at least 50 protrusions in the roughed part of the surface of the film.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have added from 0.1 to 10% of the anti-skid additive by weight to the anti-skid layer of the elastomeric film of Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, in order to provide at least 50 protrusions in the roughed part of the surface of the film, as taught by Mandzu.

6. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, as applied to claims 1-6, 11-15, 20-22, 24, 30, 34 above, and further in view of Erderly (US 5,451,450).

Mandzu, in view of Altshuler and Lefebvre, as evidenced by Miyashita has been discussed above, and fails to teach a polyolefin plastomer having a density of 0.910 g/cm^3 or lower, let alone that it is metallocene catalyzed, has a melt density of from 0.1 to 30 g/10 minutes, that is a copolymer of ethylene and a C_4 to C_{20} alpha-olefin, or that it is Ziegler-Natta-catalyzed.

However, Erderly teaches a polyolefin plastomer with a density of 0.900 g/cm^3 (column 3, lines 30-35), which is a metallocene catalyzed copolymer (column 4, lines 31-41) with a melt index in the range of about 0.5 to 50 g/10 min. (dg/min, column 6, line 66) which overlaps the claimed range of from 0.1 to 30 g/10 min. Erderly teaches that a Ziegler-Natta catalyst can also be used (column 7, lines 21) as long as the resultant composition distribution is the same as that produced by the metallocene catalyst (column, lines 9-15). The POP is a copolymer of ethylene and a C_3 to C_{20} alpha-olefin (column 3, lines 50-55), which encompasses the claimed range of C_4 to C_{20} alpha-olefin. Erderly teaches that the polyolefin plastomer is an elastomer (column 3, lines 30-35) suitable for improving the elasticity (unload power) of thin elastic films (column 8, lines 45-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have added a plastomer to the anti-skid layer of the elastomeric film of Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, in order to improve its elasticity, as taught by Erderly.

7. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, as applied to claims 1-6, 11-15, 20-22, 24, 30, 34 above, and further in view of Falla (US 5,879,768).

Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, has been discussed above, and fails to teach that at least one layer comprises low density polyethylene having a density between 0.910 and 0.930 g/cm^3, let alone that has a melt index of from 0.1 to 30 g/10 minutes.

However, Falla teaches that low density polyethylene has a density of about 0.916 to about 0.930 g/cm^3 which is inside the claimed range of between 0.910 and 0.930 g/cm^3, and has a melt index of about 0.1 to about 10 g/10 min (column 8, lines 7-15). Falla teaches the addition of 20 % by weight in the examples (column 12, lines 50-60), which is within the claimed range of 5 to 100 %, of 10 to 95 % and 15 to 75 %, as well as teaching 0 to 90 percent in the claims (column 21, lines 50-55). Falla teaches that LDPE has high melt strength and for the purpose of providing film packages that can be made fast and has few leaks (column 8, lines 28-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have added low density polyethylene having a density between 0.910 and 0.930 g/cm^3 to the anti-skid layer of the elastomeric film of Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, in order to obtain film packages with high melt strength that can be made fast and has few leaks, as taught by Falla.

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, as applied to claims 1-6, 11-15, 20-22, 24, 30, 34 above, and further in view of Karaiwa (US 6,706,385).

Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, has been discussed above, and fails to teach that the anti-skid additive is an ultra high molecular weight polyethylene.

However, Karaiwa teaches an ultrahigh molecular weight polyethylene as being equivalent to polypropylene (propylene alpha-olefin, column 6, lines 45-55), for the

purpose of providing a suitable particle with a diameter of 1 to 100 microns (column 6, lines 40-45), which overlaps the claimed range of between 50 and 500 microns. Ultrahigh molecular weight polyethylene has a melt temperature greater than 500 °F as defined by Applicant's specification (original claim 23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used ultrahigh molecular weight polyethylene particles in place of the polymeric particles of Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, in order to provide the desired particles, as taught by Karaiwa.

6. Claims 25, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, as applied to claims 1-6, 11-15, 20-22, 24, 30, 34 above, and further in view of Anthony (US 4,399, 173).

Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, has been discussed above, and fails to specify that the film consists of three layers that are an inside layer, a core layer and an outside layer, wherein the inside layer is 20% of the total thickness and comprises 100 % LLDPE; the core layer is 60% of the total thickness and comprises 100% LLDPE; and the outside layer is 20% of the total thickness and comprises 100% LLDPE.

However, Anthony teaches a film which consists of three layers that are an inside layer, a core layer and an outside layer (column 3, lines 55-60), wherein the inside layer is about 14 % of the total thickness, the core layer is about 72 % of the total thickness

and the outside layer is about 14 % of the total thickness (about 1:5:1 ratio) (column 3, lines 55-60), and that even lower ratio of thicknesses between the core layer and the outer layers are acceptable (column 3, lines 53-61) for the purpose of providing the desired end-use. Thus, it would have been obvious to one of ordinary skill in the art, to have used the claimed 20 % total thickness for the inside layer, 60 % total thickness for the core layer, and 20 % total thickness for outside layer, which corresponds to a lower 1:3:1 ratio between the core layer and the outer layers, for the purpose of proving the desired end-use. Anthony teaches that the inside, core and outer layers comprises 100 % linear low density polyethylene (low pressure, column 4, lines 45-60, which is linear, column 1, lines 8-15) for the purpose of providing improved puncture toughness, tear strength and tensile strength (column 5, lines 45-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided the elastomeric film of Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, with three layers that are an inside layer, a core layer and an outside layer, wherein the inside layer is 20% of the total thickness and comprises 100 % LLDPE; the core layer is 60% of the total thickness and comprises 100% LLDPE; and the outside layer is 20% of the total thickness and comprises 100% LLDPE, in order to provide improved puncture toughness, tear strength and tensile strength, as taught by Anthony.

6. Claims 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, as applied to

claims 1-6, 11-15, 20-22, 24, 30, 34 above, and further in view of Erickson (US 4,954,124).

Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, has been discussed above, and fails to teach the details of the gusseted film.

However, in Fig. 8 below, Erickson teaches a pre-folded gusseted film having a first film panel 12, and a second opposing film panel 14, a closed edge 12B and a parallel open edge 12A extending along the length opposite the closed edge 12B, wherein the first and second opposing film panels 12, 14 are connected at the closed edge and the gusset is formed along the length of the film at the closed edge.

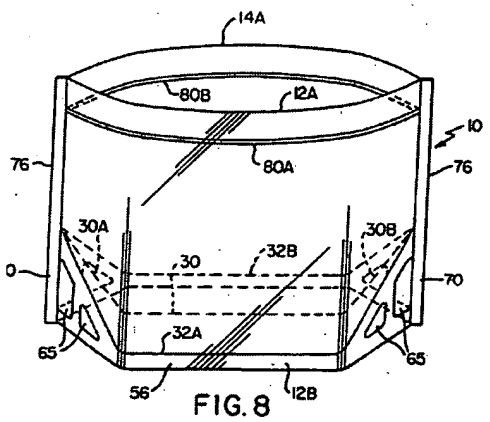

FIG. 8

In Fig. 8 of Erickson above, the parallel open edge of the film corresponds to an edge of the first film panel, 12A, and an edge of the second opposing film panel, 14A. Erickson teaches an inwardly folded lip formed at each edge of the film panels (folded inwardly, column 6, lines 54-60). Erickson teaches that the bag is capable of standing up by itself before, during and after being filled (column 1, lines 9-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used the gusseted film bag design of Erickson, for

the gusseted film bag of Mandzu in view of Altshuler and Lefebvre, as evidenced by Miyashita, in order to provide a packaging film bag which is capable of standing up by itself before during and after being filled, as taught by Erickson.

Allowable Subject Matter

7. Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record, US 6,444,080, even in view of US 6,132,844, US 5,732,745, US 5,236,483, US 5,451,456, US 5,879,768 or US 6,706,385, fails to teach or suggest the combination of an elastomeric film, with a total thickness of from about 1 mil to about 15 mil, consisting of three layers, wherein a) the inside layer is 15% of the total thickness and comprises ethylene vinyl acetate (EVA) copolymer, having 6.5% vinyl acetate by weight, linear low density polyethylene (LLDPE) hexane copolymer, carbon black, calcium carbonate, UV stabilizer and antistatic additive; (b) the core layer is 70% of the total thickness and comprises EVA copolymer, having 6.5% vinyl acetate by weight, polyethylene copolymer of hexane produced using a Ziegler-Natta catalyst, titanium dioxide, UV stabilizer and antistatic additive; and (c) the outside layer is 15% of the total thickness and comprises EVA copolymer, having 6.5% vinyl acetate by weight, polyethylene copolymer of hexane produced using a Ziegler-Natta catalyst, titanium dioxide, UV stabilizer, fluoroelastomer and an anti-skid additive which has a particle size of between 50 and 500 microns and does not melt, or has a melt temperature greater than 500 °F.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (571)272-1498. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Hon.
Sow-Fun Hon
12/27/05

/Harold Pyon/
HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772
12/29/05